



# NEURO CONSUMABLES CATALOG

INTRODUCTION & CONTENT





## INTRODUCTION

In each neurosurgical intervention, a large number of medical products is needed.

In order to facilitate the internal processes and to reduce the effort for reprocessing, the use of consumables is very common. This catalog gives you an overview of our broad portfolio of consumables frequently used in Neurosurgery.

We offer single-use instruments and implants for the three basic steps of a typical neurosurgical intervention: Opening, Hemostasis and Closure. Further special consumables can be found in the section "... and more".

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To see the whole range of our Aesculap Neurosurgery products see our Main Catalog C20121.

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## CONTENT

- 
- 1 OPENING**
    - Skin Incision
    - Craniotomy
    - Atraumatic Retraction

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  - 2 HEMOSTASIS**
    - Scalp
    - Skull
    - Vessels
    - Soft Tissue

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  - 3 CLOSURE**
    - Dura Mater
    - Bone Flap
    - Skin

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  - 4 ... AND MORE**
    - Neuroendoscopy
    - Hydrocephalus Management
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# 1 | OPENING

## SKIN INCISION



### FOR THE INITIAL SCALP INCISION, THE EXPOSURE OF

the skin, fascia and muscle – for the first steps of each neurosurgical intervention, sterile scalpels are used.

SINGLE-HANDED OPERATION






TRANSPARENT BLADE PROTECTION

SAFETY LOCKING MECHANISM  
FOR DISPOSAL

RULER IN CM AND INCH

## AESCULAP® SAFETY SCALPELS

- Transparent blade protector: Blade shape is visible and position of blade is evident
- Locking for disposal
- Single-use
- Sterile
- Stainless steel blade

Art. No.	Illustration	Package of
BA810SU		10 pieces
BA811SU		10 pieces
BA815SU		10 pieces

To see the whole range of safety scalpels visit our [Online Catalog Aesculap Surgical Instruments](#).

# 1 | OPENING

## CRANIOTOMY



### AESCULAP® ELAN 4 PRECISION, PERFORMANCE, PLEASURE

ELAN 4 is the electric power system for neuro and spine departments. Based on innovative German engineering, it addresses important requirements of the surgeon and all parties involved in handling power systems in the hospital.

- High-precision, convenient and reliable grip
- Quick, powerful and reliable work
- Clear and simple set up and easy to use

To see the whole range of ELAN 4 and relating burrs & blades see brochure 071602.

CAN BE HELD MORE RELIABLE  
AND COMFORTABLY



ALL OPERATING ELEMENTS  
ARE MARKED IN GOLD

ON/OFF FUNCTION



## BURRS FOR 2-RING & MULTIFUNCTIONAL HANDPIECES



### > Rosen burrs

Art. No.	Diameter	Illustration
GP301R	2.3 mm	
GP302R	3.0 mm	
GP303R	3.5 mm	
GP304R	4.0 mm	
GP305R	4.5 mm	
GP306R	5.0 mm	
GP307R	6.0 mm	
GP308R	7.0 mm	
GP309R	8.0 mm	

### > Twin-cut burrs

Art. No.	Diameter	Illustration
GP335R	5.0 mm	
GP336R	6.0 mm	
GP337R	7.0 mm	
GP338R	8.0 mm	
GP339R	9.0 mm	

### > Acorn burrs

Art. No.	Diameter	Illustration
GP355R	5.0 mm	
GP356R	6.0 mm	
GP357R	7.5 mm	
GP358R	9.0 mm	

■ Package of 1 piece

### > Craniotome cutter, spiral type

Art. No.	Length	Illustration
GP341R	Pediatric	
GP342R	Standard	
GP343R	Long	

# 1 | OPENING

## CRANIOTOMY



### BURRS FOR 2-RING & MULTIFUNCTIONAL HANDPIECES



#### > Diamond burrs

Art. No.	Diameter	Illustration
GP311R	2.3 mm	
GP312R	3.0 mm	
GP313R	3.5 mm	
GP314R	4.0 mm	
GP315R	4.5 mm	
GP316R	5.0 mm	
GP317R	6.0 mm	

#### > Diamond burrs, coarse

Art. No.	Diameter	Illustration
GP321R	2.3 mm	
GP322R	3.0 mm	
GP323R	4.0 mm	
GP324R	5.0 mm	
GP325R	6.0 mm	

#### > Diamond burrs, extra coarse

Art. No.	Diameter	Illustration
GP328R	4.0 mm	
GP329R	5.0 mm	
GP330R	6.0 mm	





### › Twist drills (cutting depth 4 mm – for pilot holes)

Art. No.	Diameter	Illustration
GP344R	1.0 mm	
GP345R	1.1 mm	
GP346R	1.2 mm	
GP347R	1.5 mm	

### › Twist drills

Art. No.	Diameter	Illustration
GP348R	1.5 mm	
GP349R	2.0 mm	

Package of 1 piece

### › Skull perforators

Art. No.	Diameter	Illustration
GB300R	6/9 mm	
GB302R	9/12 mm	
GB304R	12/15 mm	

### › Spare parts for skull perforators

Art. No.	Diameter	Illustration
TE561	6/9 mm	
TE562	9/12 mm	
TE563	12/15 mm	

# 1 | OPENING

## ATRAUMATIC RETRACTION



### IN THE MAJORITY OF OPEN OPERATIONS ON THE BRAIN,

spatulas are used for retraction of the tissue. The single-use silicone coated brain spatulas prevent high local pressure at the edges of the spatulas and therefore are used for atraumatic retraction.



ELASTIC SILICONE COATING

ATRAUMATIC ROUNDED EDGES

## FLEXIBLE METAL SPATULA

## AESCULAP® SILICONE BRAIN SPATULAS

- Malleable metal spatula with elastic silicone coating
- Single-use
- Sterile



Art. No.	Width	Length	Package of
FF480R	6.0 mm	200 mm	10 pieces
FF482R	7.5 mm	200 mm	10 pieces
FF484R	10.0 mm	200 mm	10 pieces
FF486R	12.5 mm	200 mm	10 pieces
FF488R	15.0 mm	200 mm	10 pieces

# 2 | HEMOSTASIS

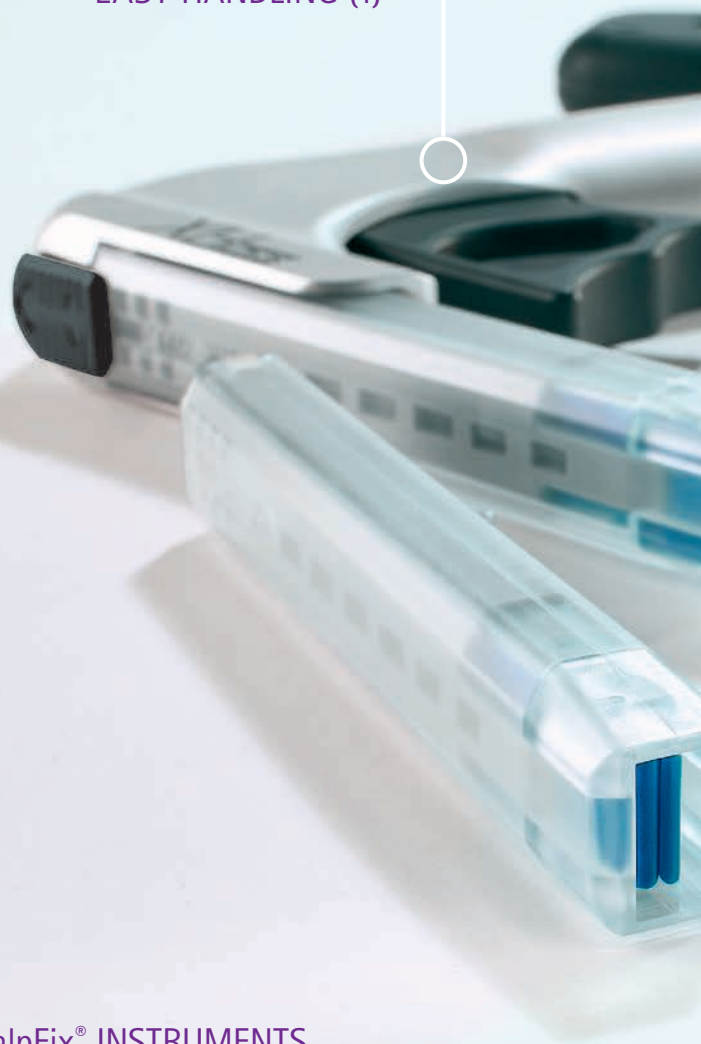
## SCALP



### MANAGING SCALP BLEEDING

The scalp is heavily supplied with blood. When it is opened, reliable hemostasis is required. In the most cases this is achieved by applying scalp clips to the wound margin.

### EASY HANDLING (1)



### AESCULAP® ScalpFix®



- Disposable cartridge with reusable handle
- Fast application (1)
- Reliable hemostasis (1)
- Easy handling (1)

Art. No.	Description	Box of
FF013P	ScalpFix® cartridge	20 cartridges with 10 scalp clips each; single sterile packed

### ScalpFix® INSTRUMENTS

FF012R

Handle made of aluminium, reusable



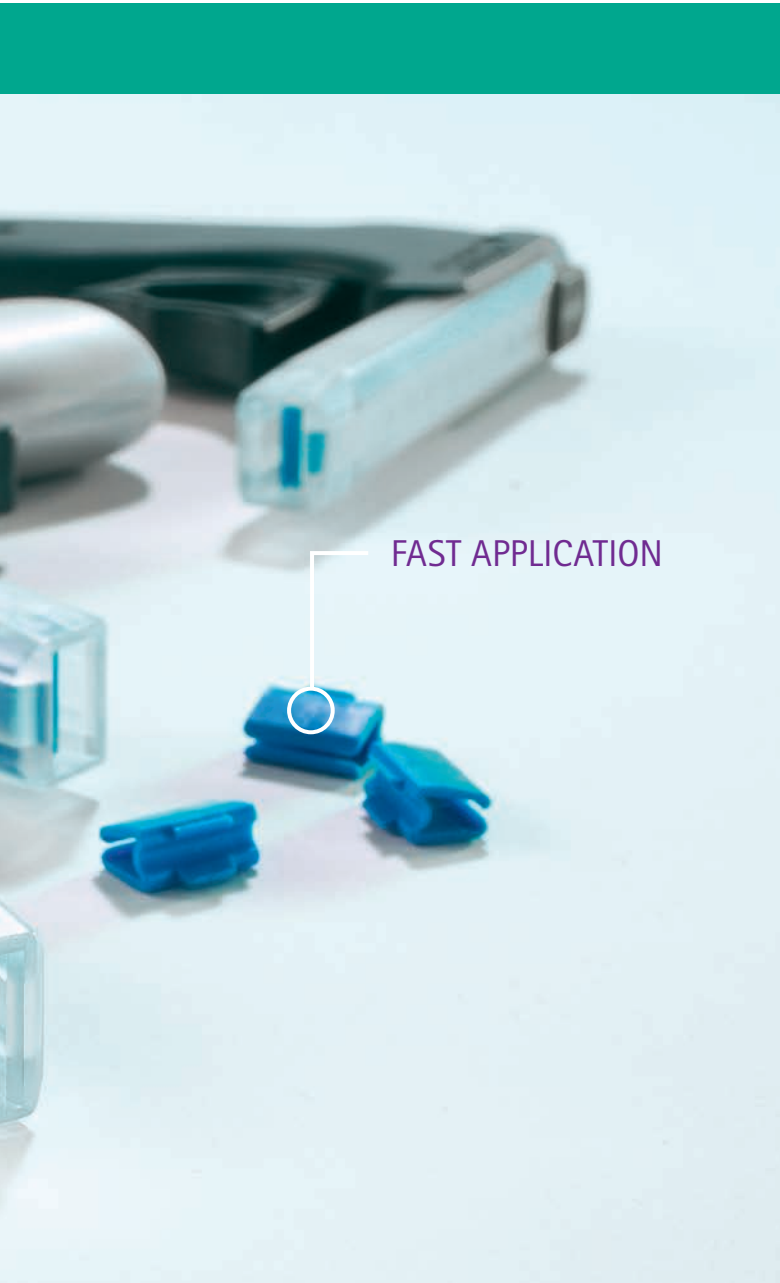
FF007P

Handle made of polymer, reusable



#### References

(1) Aesculap AG. Usability test ScalpFix 20180209-01. 2018.



FAST APPLICATION

## AESCULAP® RANEY CLIPS



- Space-saving in comparison to clamps
- Atraumatic design
- Disposable clips with reusable applicler

Art. No.	Description	Box of
FF015P	Scalp hemostasis clip, sterile, single-use	20 packages with 10 plastic scalp clips each

## RANEY INSTRUMENT

FF014R

Removing forceps, reusable



FF003R

Applying and removing forceps, reusable



# 2 | HEMOSTASIS

## SKULL



### SEVERE BLEEDING FROM THE DRILL HOLES OR WOUND MARGINS OF

the bone flap can be controlled mechanically. Bone Wax is available in classic bars.



SOFT AND EASY TO SHAPE (1-3)

## MIXTURE OF BEESWAX AND VASELINE



## AESCULAP® BONE WAX

- Mixture of beeswax (70%) and vaseline (30%)
- Non absorbable
- Mechanical control of bleeding at bones

### > Classic bars

- Can be moulded and kneaded only handwarm and applied to the bone using a spatula

Art. No.	Description	Package of
102 9754	Bone Wax classic bar	24 bars of 2.5 g each

To learn more about Bone Wax see our brochures B06802 or B02202.

#### References

- (1) Schonauer C, Tessitore E, Barbagallo G, Albanese V, Moraci A. The use of localagents: bone wax, gelatin, collagen, oxidized cellulose. Eur Spine J. 2004; 13(Suppl.1):89-96.
- (2) Ogle OE. Perioperative hemorrhage. In: Dym H, Ogle OE. Atlas of Minor Oral Surgery. Philadelphia, Pa: WB Saunders. 2000:62-3.
- (3) Santhosh Kumar MP. Local hemostatic agents in the management of bleeding in oral surgery. Asian Journal of Pharmaceutical and Clinical Research. 2016;9:3.

# 2 | HEMOSTASIS

## VESSELS



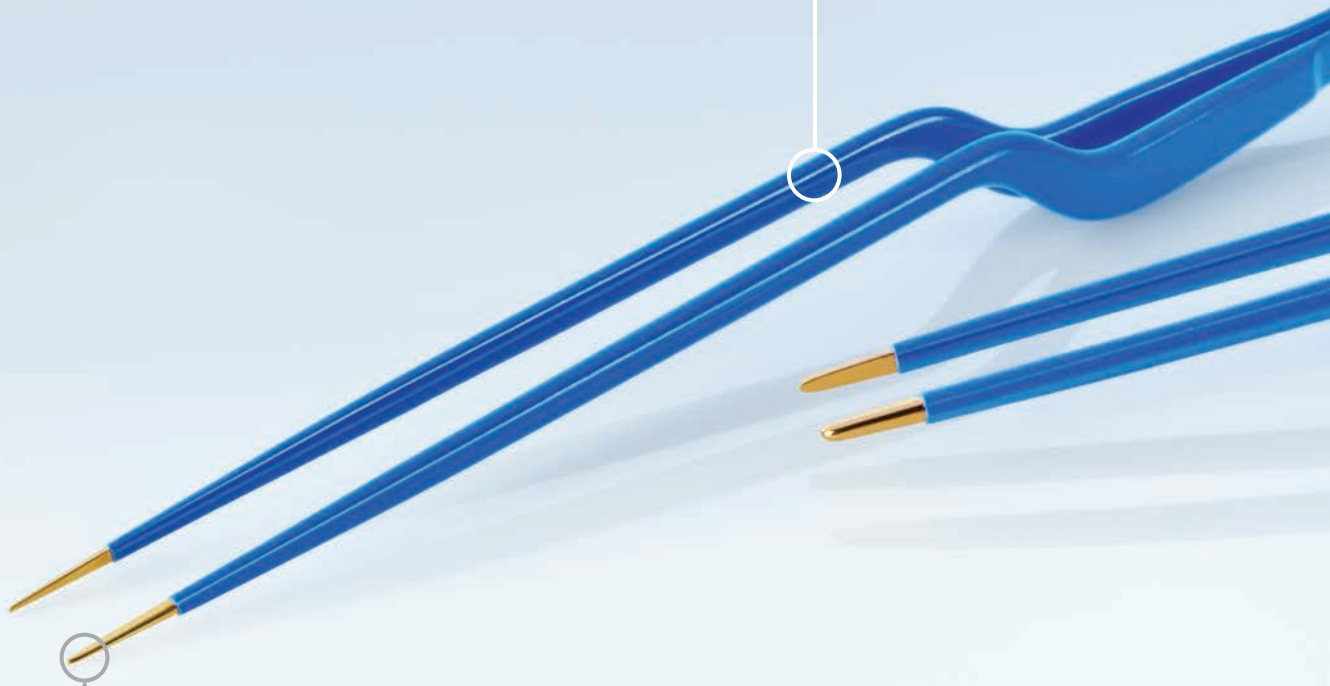
### FOR EFFECTIVE HEMOSTASIS OF BLOOD VESSELS,

bipolar coagulation forceps are used.

The single-use Rose Gold forceps are new for every case offering consistent coagulation quality. The employed materials enable a quick heat dispersion over and away from the tips which increases the non-stick characteristics.

DIFFERENT LENGTHS

NON-STICK BEHAVIOUR












ALWAYS READY TO USE

## AESCULAP® ROSE GOLD NON-STICK SINGLE-USE BIPOLAR FORCEPS

- High heat and electrical conductivity
- Good non-stick behaviour
- Single-use

### > US round pin connector

Art. No.	Diameter / Illustration	Working length	Total length	Package of
GK507SU	0.25 mm 	90 mm	190 mm	5 pieces
GK508SU		115 mm	215 mm	5 pieces
GK501SU	0.5 mm 	90 mm	190 mm	5 pieces
GK504SU		115 mm	215 mm	5 pieces
GK509SU	0.7 mm 	90 mm	190 mm	5 pieces
GK510SU		115 mm	215 mm	5 pieces
GK502SU	1.0 mm 	90 mm	190 mm	5 pieces
GK505SU		115 mm	215 mm	5 pieces
GK503SU	1.5 mm 	90 mm	190 mm	5 pieces
GK506SU		115 mm	215 mm	5 pieces

Further Non-Stick Bipolar products can be found in our brochure C30402.

# 2 | HEMOSTASIS

VESSELS



## AESCULAP® DISPOSABLE BIPOLAR CABLES

- Length: 3.70 m
- Single-use







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Further Non-Stick Bipolar products can be found in our brochure C30402.

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Art. No.	Equipment side	Instrument side – universal connector	Package of
GK290SU	ERBE int. 22 mm	  AESCULAP® tab US round pin	10 pieces
GK291SU	AESCULAP® GN160 BOWA Lamidey Söring Valleylab 28.6 mm	  AESCULAP® tab US round pin	10 pieces
GK292SU	Codman 38 mm	  AESCULAP® tab US round pin	10 pieces

# 2 | HEMOSTASIS

## SOFT TISSUE



SOFT TISSUE BLEEDING, FOR EXAMPLE DURING TUMOR REMOVAL,

can be controlled with Lyostypt® or Cellistypt®.

FAST AND EFFICIENT HEMOSTASIS (1-3)

COLLAGEN FLEECE



## Lyostypt®

- For hemostasis of capillary bleeding, oozing hemorrhages and supportive to other hemostasis techniques
- Efficient hemostasis (1-3)
- Lower amount of material needed to stop bleeding in comparison to oxidized cellulose (2)
- Collagen of bovine origin
- Absorbed within 3 weeks (4-6)
- High biocompatibility (6)

Art. No.	Size	Package of
1069128	3 x 5 cm	12 pieces
1069152	5 x 8 cm	6 pieces
1069020	5 x 8 cm	12 pieces
1069209	10 x 12 cm	4 pieces
1069039	10 x 12 cm	8 pieces
1069306	5 x 30 cm	4 pieces

To learn more about Lyostypt® see our brochure B16002.

### References

- (1) Santhosh Kumar MP. Local hemostatic agents in the management of bleeding in oral surgery. *Asian Journal of Pharmaceutical and Clinical Research*. 2016;9:3.
- (2) Qerimi B, Baumann P, Husing J, Knaebel HP, Schumacher H. Collagen hemostat significantly reduces time to hemostasis compared with cellulose: COBBANA, a single-center, randomized trial. *Am J Surg*. 2013;205(6):636-41.
- (3) Fontana T, Silvestri V, Falco N, Venturelli P, Licari L, De Marco P, Gulotta E, Gulotta L, Cocorullo G. Fibrin sealant agents: clinical application of Tachosil® in abdominal surgery. Six years experience in an emergency surgery department and review of the literature. *Il Giornale di chirurgia*. 2018;39(5):326-30.
- (4) [Data on file] Weber. Summary of animal studies to test three different hemostatic devices, which are used to stop severe liver bleeding (2006).
- (5) [Data on file] Weber. Research program testing hemostatic compress material (Sangustop) in a functionality study (Hemostasis of severe liver bleedings) (2007).
- (6) Chattopadhyay S, Raines RT. Review collagen-based biomaterials for wound healing. *Biopolymers*. 2014;101(8):821-33.

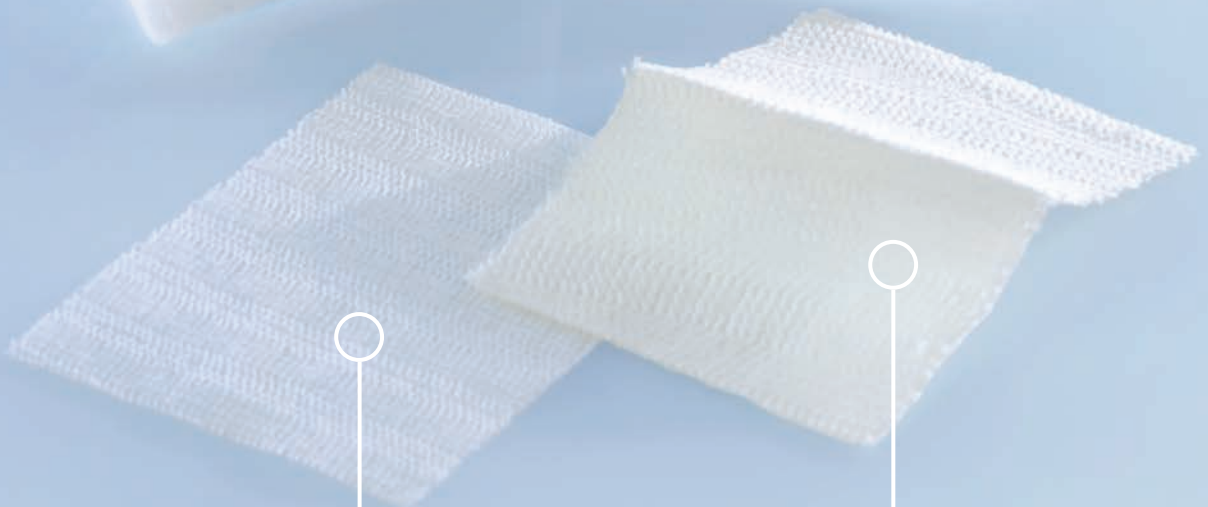
# 2 | HEMOSTASIS

SOFT TISSUE

ABSORBABLE (3, 6)



MADE FROM  
NATURAL COTTON



FOR MILD BLEEDING

## Cellistyp<sup>®</sup>



- Knitted fabric of regular density
- Oxidized resorbable cellulose hemostat, made from natural cotton

- Easy to use (2)
- Achieves hemostasis in approximately 1.5 minutes (3)
- Absorbable within approximately 14 days (3, 6)
- Antimicrobial effect on a large spectrum of pathogens (7)

Art. No.	Size	Package of
2080501	5 x 1.25 cm	15 pieces
2080508	5 x 7 cm	15 pieces
2080511	7 x 10 cm	15 pieces
2080536	5 x 35 cm	10 pieces
2080541	10 x 20 cm	10 pieces
2080515	1.5 x 1.5 cm	40 pieces

## Cellistyp<sup>®</sup> F



- Non-woven, cotton wool format
- Oxidized resorbable cellulose hemostat, made from natural cotton

- To control haemostasis over a large area or in areas that are difficult to access (2)
- High flexibility (2)
- Easy to use (2)
- Absorbable within approximately 14 days (3, 6)
- Antimicrobial effect on a large spectrum of pathogens (7)

Art. No.	Size	Package of
2082025	2.5 x 5 cm	10 pieces
2082075	5 x 7.5 cm	10 pieces
2082005	5 x 10 cm	10 pieces
2082010	10 x 10 cm	10 pieces
2082020	10 x 20 cm	10 pieces

To learn more about Cellistyp<sup>®</sup> and Cellistyp<sup>®</sup> F and further hemostats see our brochure B26102.

### References

- (2) Based on Cellistyp<sup>®</sup> Instructions For Use.
- (3) Jindřich Lahovský, MD. Evaluation of efficacy and safety of medical devices series OKCEL<sup>®</sup>. Study Report Ref. No AP-SY-1501. Data on file: 18640-033.
- (6) Jindřich Lahovský, MD. Evaluation of efficacy and safety of the medical device OKCEL<sup>®</sup> S. Study Report Ref. No AP-SY-1701. Data on file: 18640-033.
- (7) Ing. Iveta Brožková, Ph. D. Department of Biological and Biochemical Sciences at the Faculty of Chemical Technology, University of Pardubice. Final report on testing the antimicrobial activity of the product OKCEL<sup>®</sup>. Data on file: 18640-034.

# 3 | CLOSURE

DURA MATER



## DURAL DEFECT AFTER NEUROSURGICAL INTERVENTION,

e.g. after Meningeoma removal, can be closed by using dura substitution.

Depending on the indication or surgeon's preference various materials and application techniques can be used.

THINNER THAN COMPARABLE ONLAY PRODUCTS (4, 7)



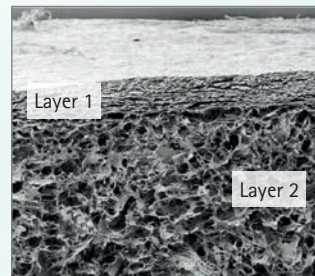
GOOD ADAPTILITY (1, 2)



## BIOLOGICAL BILAYER MEMBRANE

## ONLAY OR SUTURABLE APPLICATION

## Lyoplast® Onlay – BIOLOGICAL ONLAY DURA SUBSTITUTION



- Fast. Easy. Versatile. Reliable. (1-9)
- Onlay or suturable application (1, 2, 4, 5)
- Biological bilayer membrane
  - Bovine pericardium (layer 1)
  - Bovine split hide (layer 2)
- Collagen from bovine origin
- One dura substitute for various indications (2-5)
- High tensile strength of the implant prevents suture pull out (2, 6, 9)
- Absorbable
- Time-saving Onlay application (1, 4)
- Integrates with the body's own connective tissue cells (2)

Art. No.	Size	Package of
1067010	2.5 x 2.5 cm	1 piece
1067020	5.0 x 5.0 cm	1 piece
1067030	2.5 x 7.5 cm	1 piece
1067040	7.5 x 7.5 cm	1 piece
1067050	10.0 x 12.5 cm	1 piece

To learn more about Lyoplast® Onlay see our brochure C90102.

### References

For the references 1-9 of the safety and performance claims on Lyoplast® Onlay, please visit our website or use the QR code:

<https://www.bbraun.com/en/products/b/lyoplast-onlay.html>



# 3 | CLOSURE

## DURA MATER

### Lyoplant® – BIOLOGICAL, SUTURABLE DURA SUBSTITUTION



- High liquid tightness of the implant prevents CSF leakages (10)
- Tissue tolerant (11, 12)
- High tensile strength of the implant prevents suture pull out (12, 13)
- Good suturability (10, 13)
- Adaptable to anatomical structures (10, 14)

To learn more about Lyoplant® see our brochure C23011.

Art. No.	Size	Package of
1066021	6 x 14 cm	1 piece
1066030	8 x 9 cm	1 piece
1066242	6 x 8 cm	1 piece
1066050	5 x 6 cm	1 piece
1066048	4 x 10 cm	1 piece
1066064	4 x 5 cm	2 pieces
1066080	2 x 10 cm	2 pieces
1066102	1.5 x 3 cm	2 pieces

#### References

For the references 1-9 of the safety and performance claims on Neuro-Patch®, please visit our website or use the QR code:

<https://www.bbraun.com/en/products/b1/neuro-patch.html>



#### References

For the references 10-14 of the safety and performance claims on Lyoplant®, please visit our website or use the QR code:

<https://www.bbraun.com/en/products/b0/lyoplant.html>



## Neuro-Patch® – SYNTHETIC, SUTURABLE DURA SUBSTITUTION



- High liquid tightness of the implant prevents CSF leakages (1-3)
- Tissue tolerant (4, 5)
- High tensile strength of the implant prevents suture pull out (2-6)
- Good suturability (2)
- Adaptable to anatomical structures (1, 2, 7)

Art. No.	Size	Package of
1064002	12 x 14 cm	1 piece
1064010	6 x 14 cm	1 piece
1064020	8 x 9 cm	1 piece
1064029	6 x 8 cm	1 piece
1064040	5 x 6 cm	1 piece
1064037	4 x 10 cm	1 piece
1064045	4 x 5 cm	2 pieces
1064053	2 x 10 cm	2 pieces
1064061	1.5 x 3 cm	2 pieces

To learn more about Neuro-Patch® see our brochure C23011.

## PRIMARY DURA CLOSURE & DURA SUBSTITUTE FIXATION



Either for the primary closure of the dura mater or for the fixation of sutureable dura substitution, the appropriate suture material is needed.

For the fixation of our sutureable dura substitutes Lyoplant® and Neuro-Patch®, we recommend to use monofilament, non-absorbable suture material like Optilene®.

Product	Art. No.	Size, length	Package of	Needle
<b>&gt; Novosyn®</b> ■ Polyglactin 910	C0068012	USP 5/0, 70 cm	36 units	HR 17
■ Braided and coated	C0068013	USP 4/0, 70 cm	36 units	HR 17
■ Mid-term absorbable	C0068014	USP 3/0, 70 cm	36 units	HR 17
<b>&gt; Optilene®</b> ■ Polypropylene and polyethylene	C3090012	USP 5/0, 75 cm	36 units	HR 17
■ Monofilament	C3090013	USP 4/0, 75 cm	36 units	HR 17
■ Non-absorbable	C3090014	USP 3/0, 75 cm	36 units	HR 17

For further details about surgical sutures see brochure B06802.

# 3 | CLOSURE

## BONE FLAP



### FIXATING THE BONE FLAP AFTER SURGERY

and reconstruction of the skull in case of fractures ensures protection of the brain and supports the healing of the skull as well as the cosmesis of the patient.

### REPRODUCIBLE FIXATION



### CranioFix®2 INSTRUMENTS

<b>FF494R</b>	Applier, reusable	<b>FF105R</b>	Holding forceps, reusable	<b>FF103R</b>	Pin cutter, reusable	<b>FF104R</b>	Removal forceps, reusable

FAST APPLICATION



EASY TO USE

## CranioFix®2

- Fast, and easy application (1)
- Reproducible fixation (1)
- > 3.5 million successfully implanted clamps in over 60 countries
- Indicated for the fixation of bone fragments in skull fractures

MRI examinations using magnetic fields of 1.5 and 3.0 Tesla do not present an additional risk to CranioFix®2 implant wearers.

Illustration	Art. No.	Diam.	Package of
	FF490T	11 mm	12 pieces
	FF491T	16 mm	6 pieces
	FF492T	20 mm	6 pieces

To learn more about the CranioFix®2 system see our brochure C90611.

### References

- (1) Clinical trial. Perez-Sanchez, X. et al. Fronto-orbital craniotomy reconstruction using the titanium clamp (Craniofix): a technical note. *Surgical Neurology*. 2006; 65 (2006) : 51-54.

# 3 | CLOSURE

## BONE FLAP

» PARTICULARLY SUITABLE FOR PEDIATRIC CASES, AS THE ABSORPTION OF THE IMPLANTS SUPPORT AN UNHINDERED SKULL GROWTH.

Absorbable products facilitate re-operations e.g. in recurrent tumor cases, as no explantation of implants is necessary. After absorption the implants are not palpable or visible anymore and do not disturb post-operative imaging.

FAST & EASY APPLICATION

GOOD COSMETIC RESULTS



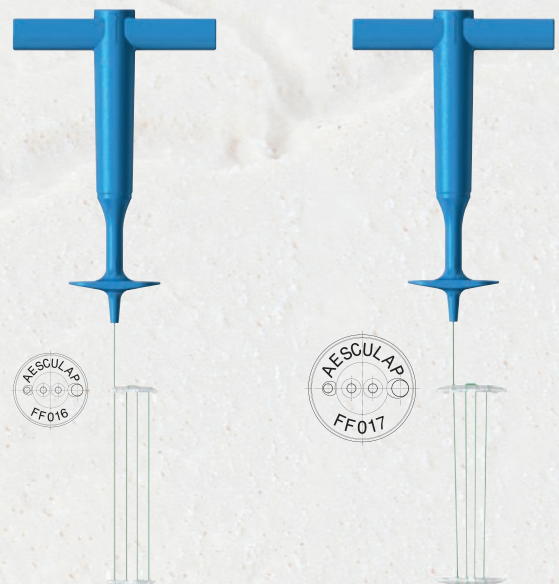


## CranioFix® Absorbable

- Fast and easy application (1, 2)
- Instrument-free application
- Unhindered skull growth and therefore particularly suitable for pediatric cases
- Absorption time appropriate for skull bone
- An in-vitro study has shown that CranioFix® absorbable retains approximately 90% of its initial strength after 12 weeks. The absorbable material completely disappears within 2-3 years

Art. No.	Diameter	Package of
FF016	11 mm	6 pieces
FF017	16 mm	6 pieces

To learn more about CranioFix® absorbable see our brochure C90611.



### References

- (1) Clinical trial. Lemcke et al. The clinical application of a new absorbable fixation clamp in craniotomy closure. A technical note after first experiences with 29 patients. Acta Neurochirurgica. 2009; 151(09):1231-1234.
- (2) Clinical trial. Matsukawa et al. Impacts of pressure bonding fixation on a bone flap depression and resorption in patients with craniotomy. Journal of Clinical Neuroscience. 2017; 41(07):162-167.

# 3 | CLOSURE

## BONE FLAP



### FIXATING THE BONE FLAP AFTER SURGERY

and reconstruction of the skull in case of fractures ensures protection of the brain and supports the healing of the skull as well as the cosmesis of the patient.

### NEURO PLATING SYSTEM

- Universal system
- Reliable and easy (1)
- Stable plates and good cosmetic results (2, 3)
- Individual and space-saving storage




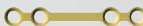




Straight Plates	Art. No.	Size
	NST304L02A	12.4 x 3.4 mm
	NST304X02A	15.4 x 3.4 mm
	NST304L04A	21.4 x 3.4 mm
	NST304X04A	24.4 x 3.4 mm
	NST304M05A	21.4 x 3.4 mm
	NST304M06A	25.9 x 3.4 mm
	NST304M10A	43.9 x 3.4 mm
	NST304M20A	88.9 x 3.4 mm





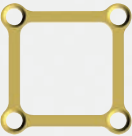
Illustration	Art. No.	Size
	NSQ304M04A	12.0 x 12.0 mm
	NSQ304L04A	14.0 x 14.0 mm
	NSQ304X04A	16.0 x 16.0 mm
	NRE304M04A*	16.0 x 10.0 mm



Illustration	Art. No.	Size
	NDS304M06A*	24.0 x 14.0 mm
	NQD304M08A	28.0 x 12.0 mm
	NQD304L08A	34.0 x 14.0 mm





Illustration	Art. No.	Size
	NDY304M06A	14.3 x 9.8 mm
	NDY304L06A	18.8 x 9.8 mm
	NYP304M05A	20.1 x 9.8 mm
	NXP304M04A	11.0 x 11.0 mm


Illustration	Art. No.	Size
	NBS304S05A	18.4 x 14.7 mm
	NBS304M05A	21.4 x 16.9 mm
	NBS304L05A	23.4 x 18.4 mm
	NBS304X05A	30.4 x 24.3 mm



Illustration	Art. No.	Diameter
	NBP304S06A	18.4 mm
	NBP304M06A	21.4 mm
	NBP304L06A	23.4 mm
	NBP304X06A	30.4 mm

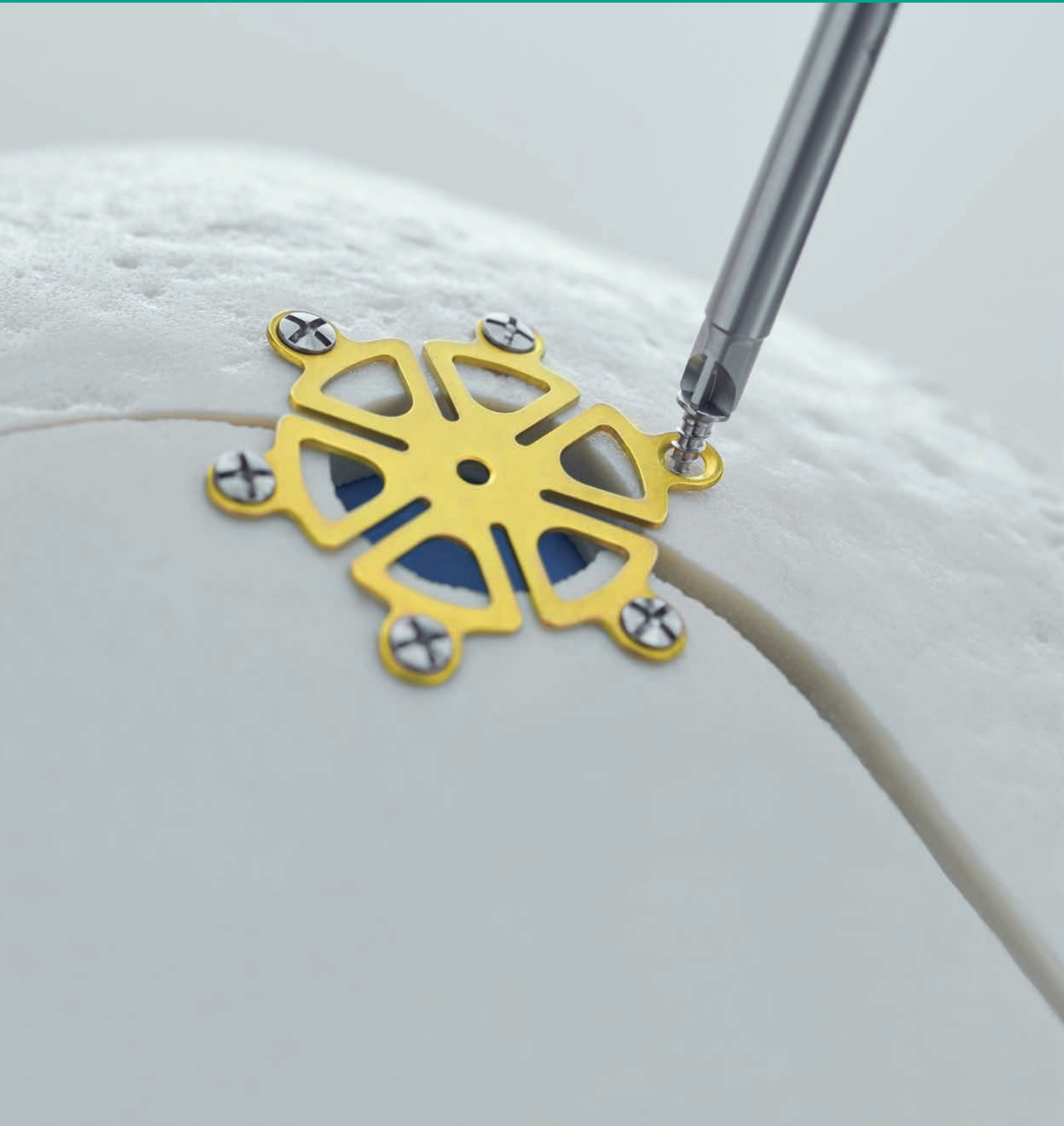
Illustration	Art. No.	Diameter
	NBC304M06A	25.9 mm
	NBC304L06A	30.9 mm

#### References

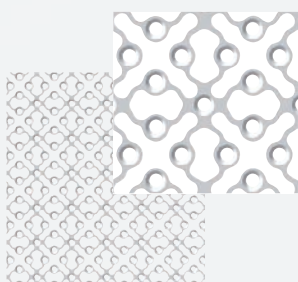
- (1) Reliable and easy handling due to storage and reprocessing of plates and screws in one tray. Due to pre-filled screw magazines, no manual sorting-in of screws necessary. Configuration list shows which plates fit in which deepening. The 0.4 mm plates can be used for a wide range of indications. There is no need for the hospital to use several systems in parallel anymore.
- (2) Osteonic Co., Ltd. Test report – neuro screw comparison, test number Osteonic-20181029.
- (3) 0.4 mm low profile plates for reduced patient palpability and therefore good cosmetic results.

# 3 | CLOSURE

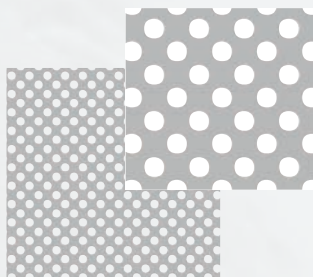
BONE FLAP



## NEURO PLATING SYSTEM MESH PLATES





Art. No.	Size	Thickness
N3D206S00A	50.0 x 50.0 mm	0.6 mm
N3D206M00A	100.0 x 100.0 mm	0.6 mm
N3D206L00A	150.0 x 150.0 mm	0.6 mm
N3D206X00A	200.0 x 200.0 mm	0.6 mm


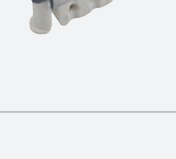



Art. No.	Size	Thickness
NME103S00	40.2 x 25.2 mm	0.3 mm
NME103M00	40.2 x 50.2 mm	0.3 mm

## NEURO PLATING SYSTEM GAP PLATES

Illustration	Art. No.	Size
	NGP204S06A	28.8 x 14.5 mm
	NGP204M06A	38.8 x 15.3 mm
	NGP204L06A	48.8 x 16.2 mm
	NTE204M00A*	42.2 x 25.1 mm

## NEURO PLATING SYSTEM SCREWS

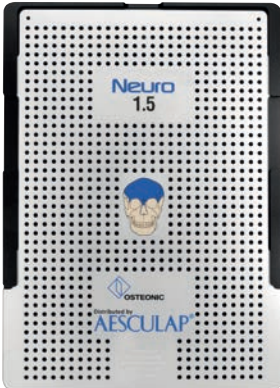
Illustration	Art. No.	Diameter / Length	Package of
	TSN-012	1.5 mm / 4.0 mm	100 self-drilling screws
	TSN-013	1.5 mm / 3.0 mm	6 self-drilling screws
	TSN-014	1.5 mm / 5.0 mm	6 self-drilling screws
	TSN-015	1.8 mm / 4.0 mm	6 self-tapping screws
	TSN-016	1.8 mm / 6.0 mm	6 self-tapping screws

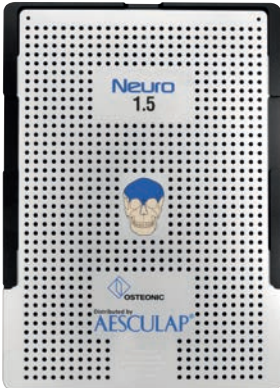
# 3 | CLOSURE

## BONE FLAP














## NEURO PLATING SYSTEM STORAGE

Illustration	Art. No.	Description	Dimensions
	TPN-007	Tray for storage and reprocessing of Neuro Plating System implants	217 x 157 x 37 mm



## NEURO PLATING SYSTEM INSTRUMENTS

Illustration	Art. No.	Description	Length
	LDS-01	Screwdriver Shaft	75 mm
	IOC-017	Screwdriver (large)	100 mm
	IOC-018	Screwdriver (small)	100 mm
	LDS-02	Screwdriver Shaft for Power Screwdriver	57 mm
	IOC-141	Power Screwdriver Note: single-use, sterile delivery	175 mm
	NDB-01	Drill Bit (J-Notch-coupling) Diameter: 1.1 mm, drill depth: 4 mm	52 mm
	GP345R	Twist drill for ELAN4-2-Ring handpieces Diameter: 1.1 mm, Incision depth: 4 mm	56 mm
	IOC-033	Holding Forceps angled	130 mm
	IOC-040	Plate Cutter	110 mm
	IOC-041	Mesh Cutter	190 mm
	IOC-070	Plate Bending Pliers	150 mm

All instruments except the Power Screwdriver (IOC-141) are reusable.  
The Mesh Cutter and the Plate Bending Pliers do not fit into the tray and need to be stored separately.

To learn more about the Neuro Plating System see our brochure C90611.

# 3 | CLOSURE

## BONE FLAP

### NEURO PLATING SYSTEM STERILE KITS

- Space-saving
- Cost-saving
- Time-saving
- Easy handling
- See-through package

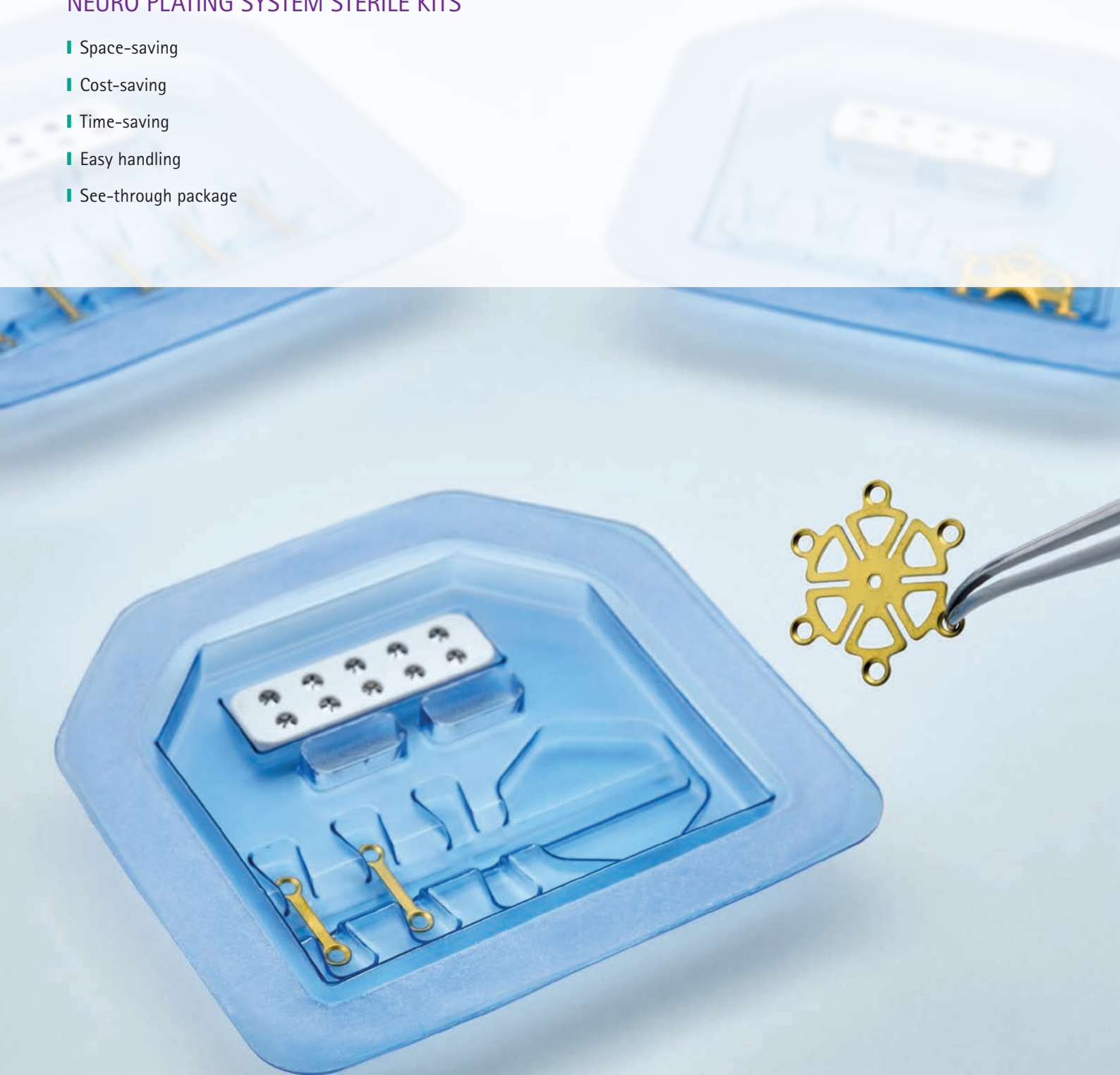
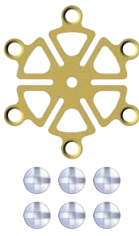


Illustration	Art. No.	Content	Quantity	Description
	TCN-011		3 6	<b>Standard long</b> Straight Plate, 2 Hole, 15.4 mm Self-drilling screw, 1.5 x 4 mm
	TCN-021		3 6	<b>Standard short</b> Straight Plate, 2 Hole, 12.4 mm Self-drilling screw, 1.5 x 4 mm
	TCN-031		1 2 10	<b>Standard long Burrhole Plate</b> Burrhole Plate, 6 Hole, 23.4 mm Straight Plate, 2 Hole, 15.4 mm Self-drilling screw, 1.5 x 4 mm
	TCN-041		1 6	<b>Burrhole Plate</b> Burrhole Plate, 6 Hole, 23.4 mm Self-drilling Screw, 1.5 x 4 mm
	TCN-051		1 5	<b>Burrhole Plate Slot</b> Burrhole Plate Slot, 5 Hole, 23.4 x 18.4 mm Self-drilling screw 1.5 x 4 mm

# 3 | CLOSURE

SKIN



## AT THE END OF EVERY SURGICAL PROCEDURE,

fast and easy skin closure is desired. This step has to be secure and confident, thus reducing the risk to the patient.

ABSORBABLE AND  
NON-ABSORBABLE  
SUTURES

For further details about surgical sutures see brochure B06802.








## SUTURES



### > Muscle & subcutaneous – Novosyn®

- Polyglactin 910
- Braided, coated
- Mid-term absorbable

Art. No.	Size, length	Package of	Needle
C0068543	USP 0, 90 cm	36 units	
C0068013	USP 4/0, 70 cm	36 units	
C0068014	USP 3/0, 70 cm	36 units	



### > Skin – Monosyn®

- Glyconate
- Monofilament
- Mid-term absorbable

Art. No.	Size, length	Package of	Needle
C0023627	USP 4/0, 70 cm	36 units	
C0023628	USP 3/0, 70 cm	36 units	

### > Skin – Dafilon®

- Polyamide
- Monofilament
- Non-absorbable

Art. No.	Size, length	Package of	Needle
C0936731	USP 4/0, 75 cm	36 units	
C0936740	USP 3/0, 75 cm	36 units	

# 3 | CLOSURE

SKIN



## SINGLE-USE SKIN STAPLER





### Staple information:

Type: 35W

### Staple dimensions:

Crown: 7.2 mm

Leg: 4.9 mm

Illustration	Art. No.	Description	Package of
	783106	Skin stapler 35W, single-use	5 pieces
	783104	Skin staple remover C-W, single-use	20 pieces

To learn more about Skin stapler see brochure B08002.

## SKIN STAPLER FOR WOUND CLOSURE

- Lightweight design
- Angled head to increase visibility
- Plastic cartridge that provides a direct view of remaining staples

## SINGLE-USE SKIN STAPLER





### ■ Staple information:

Type: 35W

### ■ Staple dimensions:

Crown: 6.9 mm

Leg: 4.2 mm

Illustration	Art. No.	Description	Package of
	783100	Manipler® AZ, single-use	6 pieces
	783101	Skin staple remover, single-use	6 pieces

To learn more about Manipler® see brochure B16202.

# 4 | ... AND MORE

## NEUROENDOSCOPY

The Aesculap MINOP® product portfolio is designed for Minimally Invasive Neuroendoscopic Operation and covers the three main subdisciplines in the field of cranial neuroendoscopic surgery: intraventricular neuroendoscopy, transnasal endoscopy and endoscope-assisted microneurosurgery.

The neuroendoscopy product lines include Full HD compatible endoscopes with different directions of view as well as a wide range of instruments and accessories.

### > Sterile camera drape

- Ring design


Illustration	Art. No.	Package of
	JG904	25 pieces

### > Sterile anti-fog solution for endoscopes

Illustration	Art. No.	Package of
	JG910	20 pieces

### > MINOP® TREND single-use suction/irrigation tube

- For MINOP® TREND handle FH615



Illustration	Art. No.	Length	Package of
	FH605SU	4.5 m	10 tubes

For more information about Neuroendoscopy see our brochure C35502.

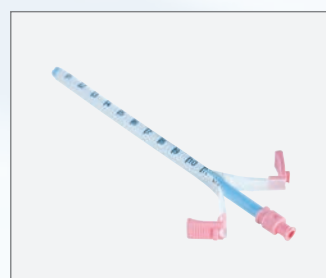
### > MINOP® single-use suction cannula



- For removal of cystic intraventricular lesions or puncturing the floor of the 3<sup>rd</sup> ventricle
- Optional control of suction via thumb plate or via syringe

Illustration	Art. No.	Diam.	Length	Tip
	FH606SU	2 mm	240 mm	Blunt 0°
	FH607SU	2 mm	240 mm	Sharp 45°



### > MINOP® Disposable introducer



- Preserves the brain in case of repeated intra-parenchymal back and forth movements of the trocar during the procedure

- Round and blunt obturator tip for less traumatic insertion into the ventricles

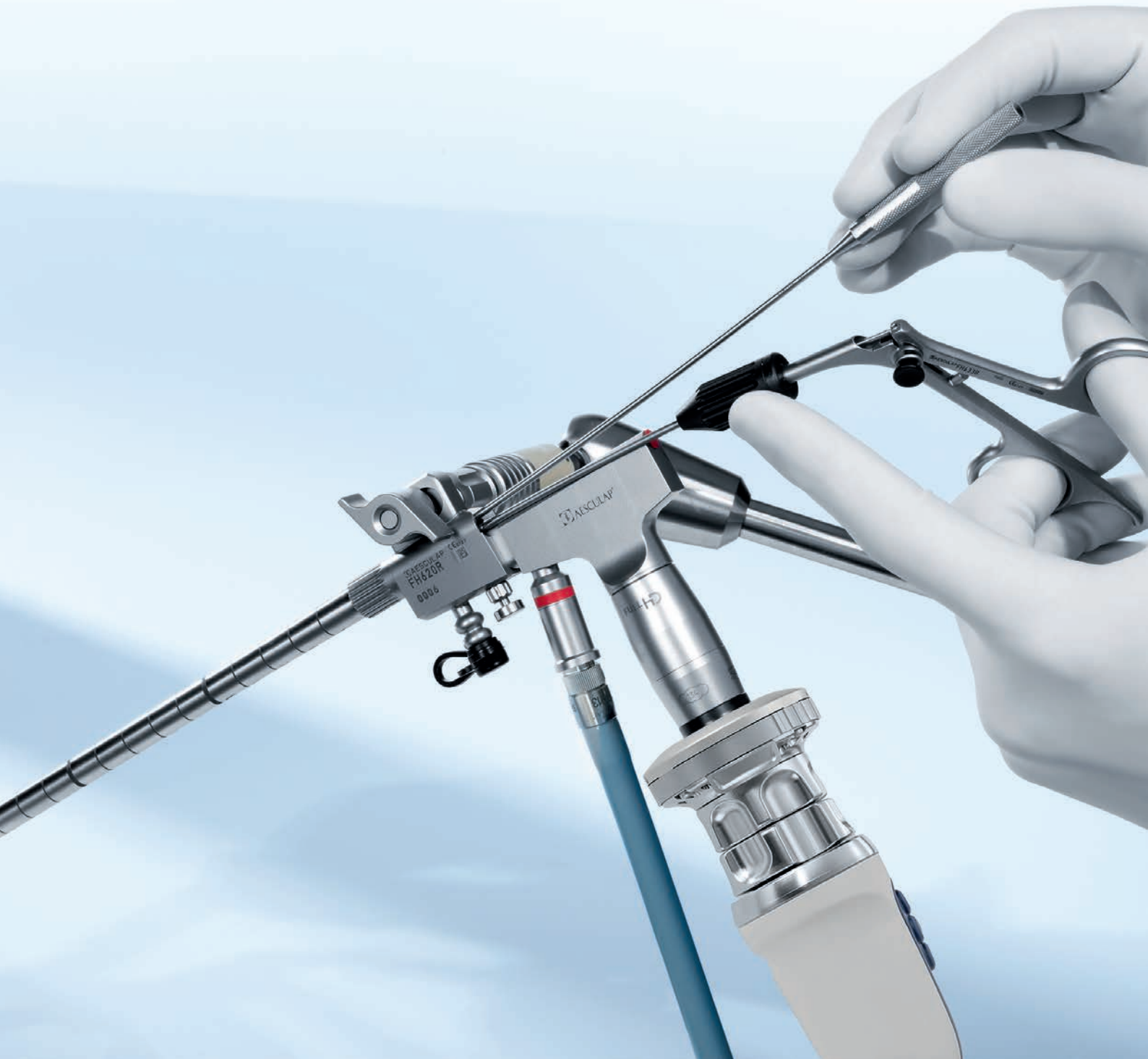
- Large depth scale for safer positioning and better control inside the ventricles

Illustration	Art. No.	Diam.	Package of
	FH604SU*	19 Fr.***	5 pieces
	FH603SU**	10 Fr.***	5 pieces

\*Especially for MINOP® trocar FF399R

\*\*Especially for PaediScope® PF010A

\*\*\*3 Fr. = 1 mm



# 4 | ... AND MORE

## HYDROCEPHALUS MANAGEMENT

### > Single-use tunneling instrument



- For percutaneous tunneling and inserting of catheters
- Flexible

Art. No.	Length	Package of
FV002R	300 mm	10 pieces
FV003R	450 mm	10 pieces
FV004R	600 mm	10 pieces

For more information see our brochure C82502.

### > Single-use tunneling instrument



- Exchangeable tip: Sharp or blunt
- Changeable handle position:  
Longitudinal and lateral alignment
- 2 different degrees of stiffness:  
Rigid and standard version

Illustration	Art. No.	Length	Package of
	FX001SU	300 mm	10 pieces
	FX002SU	450 mm	10 pieces
	FX003SU	600 mm	10 pieces
	FX004SU	700 mm	10 pieces

- Shaft: rigid version (**no** ring marking)

Illustration	Art. No.	Length	Package of
	FX005SU	300 mm	10 pieces
	FX006SU	450 mm	10 pieces
	FX007SU	600 mm	10 pieces
	FX008SU	700 mm	10 pieces

- Shaft: Standard version (**with** ring marking)

For more information see our brochure C01502.



# AESCULAP® – a B. Braun brand

Aesculap AG | Am Aesculap-Platz | 78532 Tuttlingen | Germany  
Phone +49 7461 95-0 | Fax +49 7461 95-2600 | [www.aesculap.com](http://www.aesculap.com)

Information according to Regulation (EU) 2017/745 and Council Directive 93/42/EEC respectively:



Manufacturer of the Neuro Plating System:

Osteonic Co., Ltd. | Suite 1206 | Ace Techno 3 Cha | 38, Digital-ro 29-gil | Guro-gu | Seoul | Korea

Manufacturer of Cellistyp:

Synthesia, a.s. | Semtín 103 | 530 02 Pardubice | Czech Republic

Manufacturer of Skin Stapler AZ:

Mani, Inc. | 8-3 Kiyohara Industrial Park | Utsunomiya | Tochigi 321-3231 | Japan

Manufacturer of Stapler 35 W and Single-use staple remover C-W:

Ningbo Advan Electrical Co., Ltd. | Industrial Development Zone | Fuhai Town | Cixi City | China

Manufacturer of Bone Wax, Lyostypt, Novosyn, Optilene, Monosyn and Dafilon:

B. Braun Surgical, S.A. | Carretera de Terrassa, 121 | 08191 Rubí | Spain

The main product trademark "AESCULAP" and the product trademarks "CranioFix", "ScalpFix", "Lyostypt", "Lyoplant", "Neuro-Patch", "Cellistyp", "Novosyn", "MINOP", "PaediScope" and "Optilene" are registered trademarks of Aesculap AG.

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